

## Cardiac Rehabilitation, Phase II Outpatient

<b>Policy ID:</b>	HHO-DE-MP-1026
<b>Approved By:</b>	Highmark Health Options – Market Leadership
<b>Provider Notice Date:</b>	
<b>Original Effective Date:</b>	N/A
<b>Annual Approval Date:</b>	10/2022
<b>Last Revision Date:</b>	10/08/2021
<b>Products:</b>	Medicaid
<b>Application:</b>	
<b>Page Number(s):</b>	1-6

### Disclaimer

Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

### POLICY STATEMENT

Highmark Health Options may provide coverage under the medical-surgical benefits of the Company's Medicaid products for medically necessary outpatient and medically supervised Phase II cardiac rehabilitation programs. Phase III and phase IV cardiac rehabilitation programs are considered maintenance programs and not medically necessary.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and the Delaware Department of Health and Social Services (DHSS) and all applicable state and federal regulations.

### DEFINITIONS

**Cardiac Rehabilitation** – The American Association of Cardiovascular and Pulmonary Rehabilitation and the American Heart Association have defined cardiac rehabilitation as coordinated, multifaceted interventions designed to optimize a cardiac patient's physical, psychological, and social function, in addition to stabilizing, slowing, or even reversing the progression of the underlying atherosclerotic processes, thereby reducing morbidity and mortality.

**Highmark Health Options (HHO)** – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently serves Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan and Health Plan Plus members.

**Metabolic Equivalent Task (METs)** – A measure of exercise intensity, formally known as a metabolic equivalent. METs are directly related to the intensity of physical activity and the amount of oxygen consumed. The larger the MET value, the more calories burnt.

## **POLICY AND PROCEDURE**

Cardiac rehabilitation programs, Phase II Outpatient may be considered medically necessary when individually prescribed by a physician and the following criteria are met:

- Initiated within 12 months of ANY of the following:
  - Acute myocardial infarction (MI) (heart attack); or
  - Coronary artery bypass graft (CABG) surgery; or
  - Percutaneous transluminal coronary angioplasty (PTCA) or coronary stenting; or
  - Heart valve surgery; or
  - Heart or heart-lung transplantation; or
  - Current stable angina pectoris; or
  - Compensated heart failure; or
  - Coronary artery disease (CAD) associated with chronic; stable angina pectoris that has failed to respond adequately to pharmacotherapy and is interfering with the ability to perform age-related activities of daily living and/or impairing functional abilities; and
- The individual does not have an absolute contraindication to cardiac rehabilitation (examples include: unstable angina, overt cardiac failure, dangerous arrhythmias, dissecting aneurysm, myocarditis, acute pericarditis, severe obstruction of the left ventricular outflow tract, severe hypertension, exertional hypotension or syncope, uncontrolled diabetes mellitus, severe orthopedic limitations, and recent systemic or pulmonary embolus).

Following the initial evaluation, services provided in conjunction with a phase II outpatient cardiac rehab program may be considered medically necessary for up to 36 sessions, three (3) sessions per week, for a 12-week period. The need for supervised exercise sessions can be determined by the individual's risk stratification as follows:

- Low Risk: six (6)-18 exercise sessions
- Moderate Risk: 12-24 exercise sessions
- High Risk: 18-36 exercise sessions

A routine cardiac rehabilitation session usually consists of an exercise training session lasting 20-60 minutes and at least ONE of the following services:

- Continuous ECG/EKG monitoring during exercise; or
- EKG rhythm strip with interpretation and physician's revision of the exercise program; and/or
- Limited physician follow-up to adjust medication or other treatment(s) related to the program.
- Cardiac rehabilitation exercise programs beyond the initial 12-week/36 session will require individual medical review. If documentation substantiates that additional sessions are medically necessary to reach a realistic and achievable increase in work capacity, the number of services may be extended, but not exceed a maximum of 24 weeks or 72 sessions.
- Phase II cardiac rehabilitation services that do not meet the medical necessity criteria and frequency guidelines outlined on this policy will be denied as not medically necessary.
- Maintenance exercise programs undertaken by the participant after formal freestanding clinic or facility-based programs are completed are not covered.
- Generally, psychotherapy and psychological testing are not considered medically necessary for all cardiac rehabilitation participants. However, if a participant has been diagnosed with a mental, psychoneurotic or personality disorder, psychotherapy performed by a psychiatrist or

- a psychologist it may be considered medically necessary. In addition, psychological diagnostic testing of a cardiac rehabilitation participant who exhibits symptoms of mental illness or mental problems (e.g., anxiety disorder associated with the cardiac disease) may be considered medically necessary.
- Physical and/or occupational therapies are considered not medically necessary in conjunction with cardiac rehabilitation services unless performed for an unrelated diagnosis (e.g., a participant who is recuperating from an acute phase of heart disease may have also had a stroke which could require physical and/or occupational therapies).
  - Repeat participation in an outpatient cardiac rehabilitation program in the absence of another qualifying cardiac event is considered experimental/investigational and therefore, noncovered. Scientific evidence does not support the need for repeat cardiac rehabilitation in the absence of cardiac events.
  - Educational services (e.g., lectures, counseling) that may be provided as part of a cardiac rehabilitation exercise program are not eligible for separate reimbursement.
  - Phase III cardiac rehabilitation programs, or self-directed, self-controlled or monitored exercise programs are considered not medically necessary.
  - Phase IV cardiac rehabilitation programs or maintenance therapy that may be safely carried out without medical supervision are considered not medically necessary.
  - Cardiac rehabilitation when used in a preventive or prophylactic way, such as for angina, hypertension, or diabetes is considered not medically necessary.

**Risk stratification based on the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR)**

Cardiac rehabilitation services are contraindicated in patients with the following conditions:

- A recent significant change in the resting ECG suggesting significant ischemia, recent MI (within 2 days), or other acute cardiac event;
- Severe residual angina;
- Uncompensated heart failure;
- Uncontrolled arrhythmias.
- Symptomatic severe aortic stenosis;
- Severe ischemia, LV dysfunction, or arrhythmia during exercise testing;
- Poorly controlled hypertension;
- Acute pulmonary embolism or pulmonary infarction;
- Acute myocarditis or pericarditis;
- Suspected or known dissecting aneurysm;
- Acute systemic infection, accompanied by fever, body aches, or swollen lymph glands;
- Hypertensive or any hypotensive systolic blood pressure response to exercise.
- Relative contraindications to exercise include:
  - Left main coronary stenosis;
  - Moderate stenotic valvular heart disease;
  - Electrolyte abnormalities (e.g., hypokalemia, hypomagnesemia);
  - Severe arterial hypertension (i.e., systolic BP If greater than 200mm Hg and/or diastolic BP of greater than 110 mm Hg) at rest;
  - Tachydysrhythmia or bradydysrhythmia;
  - Hypertrophic cardiomyopathy and other forms of outflow tract obstruction;
  - Neuromuscular, musculoskeletal, or rheumatoid disorders that are exacerbated by exercise;
  - High-degree atrioventricular block;
  - Ventricular aneurysm.
- Uncontrolled metabolic disease (e.g., diabetes, thyrotoxicosis, or myxedema);
- Chronic infectious disease (e.g., mononucleosis, hepatitis, AIDS);

- Mental or physical impairment leading to inability to exercise adequately.

The participant's risk for another coronary event determines the status of the individual as a high moderate-, or low-risk. Use of early (pre-discharge) exercise testing, with or without radionuclide studies, provides the ability to determine the probability of a proximate ischemic event. Risk stratification testing benefits all participants regardless of their level of risk.

Initially, a comprehensive evaluation may be performed to evaluate the participant and determine an appropriate exercise program.

In addition to typical program duration, an endpoint for cardiac rehabilitation services may also be determined using the participant's work capacity as measured by metabolic equivalents of task (MET). A MET is the measurement of the work required from the cardiovascular and pulmonary systems by a given activity. One MET equals approximately 3.5 ml of oxygen consumption per kilogram of body weight per minute.

Depending on variables such as age, sex, cardiac history, the existence of other complicating medical conditions, etc., work capacity usually levels out at a maximal level of five (5) to eight (8) METs for most cardiac rehabilitation participants. Reasonable endpoint criteria for medically supervised cardiac rehabilitation programs can include the ability of the participant to exercise at a level of eight (8) or more METs without cardiac symptoms and the acquisition of the skills necessary for the self-monitoring of an unsupervised exercise program.

Since many participants with cardiac disease will not be capable of achieving this level of work capacity, the absence of improvement in capacity after three (3) serial exercise tests can be used as an alternative endpoint indicator.

Once a participant's maximal work capacity has leveled out, ongoing exercise is considered maintenance. Additional cardiac rehabilitation services are eligible based on the clinical criteria defined in this policy when the individual has a repeat occurrence of the covered conditions, e.g., another cardiovascular surgery, a new MI, etc.

## PROCEDURE CODES

Table	Style
93797	Physician or other qualified health care professional services for outpatient cardiac rehabilitation without continuous ECG monitoring (per session).
93798	Physician or other qualified health care professional services for outpatient cardiac rehabilitation with continuous ECG monitoring (per session).

## Covered Diagnosis Codes for procedure codes 93797 and 93798

A18.84	I21.01	I21.02	I20.1	I20.8
I20.9	I21.09	I21.11	I21.19	I21.21
I21.29	I21.3	I21.4	I21.9	I21.A1
I21.A9	I22.0	I22.1	I22.2	I22.8
I22.9	I25.10	I25.110	I25.111	I25.118
I25.119	I25.2	I25.3	I25.700	I25.701

I25.708	I25.709	I25.710	I25.711	I25.718
I25.719	I25.720	I25.721	I25.728	I25.729
I25.730	I25.731	I25.738	I25.739	I25.750
I25.751	I25.758	I25.759	I25.760	I25.761
I25.768	I25.769	I25.790	I25.791	I25.798
I25.799	I25.810	I25.811	I25.812	I42.0
I42.1	I42.2	I42.3	I42.4	I42.5
I42.62	I46.8	I46.9	I50.1	I50.20
I50.21	I50.22	I50.23	I50.30	I50.31
I50.32	I50.33	I50.40	I50.41	I50.42
I50.43	I50.9	Z48.21	Z48.280	Z94.1
Z94.3	Z95.1	Z95.2	Z95.3	Z95.4
Z95.5	Z98.61	Z98.890		

### Noncovered Services

Proprietary cardiac rehab programs are not covered above and beyond coverage for standard cardiac rehab.

### References

Yokoyama M, Miyauchi K, Shimada K, et al. Effects of phase II comprehensive cardiac rehabilitation on coronary plaque volume after acute coronary syndrome. *Int Heart Journal*. 2015;56(6):597-604.

Azcar R, Bullut M, Ergün S, et al. Evaluation of the effect of cardiac rehabilitation on left atrial and left ventricular function and its relationship with changes in arterial stiffness in patients with acute myocardial infarction. *Echocardiography*. 2015;32(3):443-447.

Currie K, Bailey K, Jung M, et al. Effects of resistance training combined with moderate-intensity endurance or low-volume high-intensity interval exercise on cardiovascular risk factors in patients with coronary artery disease. *Journal of Science and Medicine in Sport*. 2015; 18(6):637-642.

Kuo L. Effect of Cardiac Rehabilitation on Cardiovascular Events after Coronary Artery Bypass Grafting in a 6-Year Follow-Up Study. *Health Science Journal*. 2016;10(3:9): 1-6.

Aamot I. Long-term Exercise Adherence After High-intensity Interval Training in Cardiac Rehabilitation: A Randomized Study. *Physiother. Res. Int*. 2016; 21:54-64.

Price K. A review of guidelines for cardiac rehabilitation exercise programmes: Is there an international consensus? *Eur J Prev Cardiol* 2016:1-19.

Currie K. Effects of resistance training combined with moderate-intensity endurance or low volume high-intensity interval exercise on cardiovascular risk factors in patients with coronary artery disease. *Journal of Science and Medicine in Sport*. 2015;18:637-642.

Reeves G. Evolving Role of Exercise Testing in Contemporary Cardiac Rehabilitation. *CardioPulm Rehabil*. 2016;36:309-319.

Grace S. Cardiac rehabilitation delivery model for low resource settings: an International Council of Cardiovascular Prevention and Rehabilitation consensus statement. *Prog Cardiovasc Dis* 9(3):303-22.

Hayes, Inc. Hayes Comparative Effectiveness Review. Comparative Effectiveness Review of Intensive Cardiac Rehabilitation Programs for Coronary Artery Disease. Lansdale, PA: Hayes, Inc.: February 22, 2018, Update March 2019. Accessed 7/12/2019.

Bitsch B, Nielsen, C Stapelfeldt C, Lynggaard V. Effect of the patient education-Learning and Coping strategies-in cardiac rehabilitation on return to work at one year: a randomized controlled trial show. *BMC Cardiovasc Dis*. 2018;18:101.

Cuenza L, Yap, E, Ebba, E. Assessment of the prognostic utility of the FIT treadmill score in coronary artery disease patients undergoing cardiac rehabilitation. *J Cardiovasc Thorac Res*. 2019;11(1):8-13.

Prabue N, Maiya A, Prabhu NS. Impact of cardiac rehabilitation of functional capacity and physical activity after coronary revascularization: A scientific review. *Card Res Prac*. 2020; 2020.